

## Anti-Dis3 (S. pombe) antibody, rabbit serum

## 63-123 100 µl

S. pombe **Dis3** protein is an essential component for mitotic segregation (ref.1). It is a component of the exosome 3'->5' exoribonuclease complex. It is required for the 3'-processing of the 7S pre-RNA to the mature nuclear complex. It is also associated with the GTPase Ran and has a 3'-5' exonuclease activity. It is composed of 970 amino acids with molecular mass of 110 kDa. It is highly conserved functionally and structurally from yeast to human.

## Applications:

1. Western blotting (100~300 fold dilution) 2. Immunofluorescence staining

Immunogen: Recombinant truncated Dis3 protein (70 kDa)

Specificity: Reacts with S. pombe Dis3 protein. Not tested for other species.

Form: Rabbit antiserum added with 0.05 % sodium azide, 50% glycerol

Storage: Shipped at 4°C or -20°C, and upon arrival, aliquot and store at -20°C.

## References: This antibody was used in the following references.

- Kinoshita N., Goebl M., Yanagida M. "The fission yeast dis3+ gene encodes a 110-kDa essential protein implicated in mitotic control." *Mol. Cell. Biol.* 11:5839-5847(1991) [PubMed: 1944266]
- Noguchi E. *et al.* "Dis3, implicated in mitotic control, binds directly to Ran and enhances the GEF activity of RCC1." *EMBO J.* 15:5595-5605(1996) [PubMed: 8896453]

Fig.1 Immunoblotting of extracts of *S. pombe* cells transformed with the vector or plasmids carrying truncated genes (172, A, B, C, E) with anti-Dis3 antibodies.Polypeptides of expected molecular masses were detected (ref.1).

Fig.2 Localization of the *dis3*<sup>+</sup> gene product by immunofluorescence microscopy. *S. pombe* cells were fixed and prepared for immunofluorescence microscopy with anti-dis3 antibodies. Left, DAPI stain for chromosomal DNA. Right, anti-Dis3 antibody stain (ref.1).

